

# DEPARTMENT OF HEALTH AND HUMAN SERVICES ENTERPRISE PERFORMANCE LIFE CYCLE FRAMEWORK

# CHECKLIST

<OPDIV Logo>

# **TEST PLAN**

Issue Date: <dd/mm/yyyy>
Revision Date: <dd/mm/yyyy>

# **Document Purpose**

The purpose of this document is to provide a quick checklist for use by the project manager to ensure that all appropriate activities related to the **Test Plan** have been addressed.

## **High Level Test Objectives**

- To ensure that the [work product] satisfies all project requirements.
- To ensure that all components of the [work product] function according to design.
- To ensure that all use case scenarios can be executed successfully.
- To ensure that the [work product] can perform under the anticipated user load.
- To determine if the application is intuitive and easy to use, and if it presents the users with the intended user experience.

# Testing schedule/Resources/Status

Milestone/Test phase	Duration (days)	Resources	Date(s)	Status
Unit testing				
Functional testing				
Load testing				
Volume testing				
Acceptance testing				
Usability testing				
Compatibility Testing				
Conformance				
Testing				
Regression Testing				
Stress Testing				
Vulnerability Testing				

### **Activities Checklist**

This section provides a checklist that may be used during the preparation, implementation, and review of testing activities depending on the types of testing conducted.

Checklist				
Have you set up the following for each type of testing:				
Environment				
URL				
Access Instructions				
User ID/password				
Unit Testing				
Unit tests are basic tests at the module level to ensure that a given function works. Unit testing is generally performed by the programmer or developer while building a system.				
Has the test data required for the particular test been identified?				
Does the unit testing validate the data at the field level?				
Have any preconditions been setup?				
Have step-by-step test instructions (including sample input data) been set up?				
Has the process for how original data will be recovered before and after test execution been described?				
Has how test data will be identified, maintained, and version-controlled been described?				

Has the support need to test external or existing programs been identified?

Have the procedures for reporting errors, test results, and reworking and retesting programs been documented?

Has the testing used the normal input and database or is special test input being used to perform the testing?

Have the expected results of the testing performed been documented?

Have you provide documentation to verify actual outcome?

#### **Functional Testing**

Functional tests are conducted to ensure the system behaves according to the functional requirements. Use cases are developed to validate that all functions outlined in the requirements are present in the system and work as intended. This testing should not be performed by the people who built the system.

Has the test data required for the particular test been identified?

Does the functional testing validate the data at the field level?

Have any preconditions been setup?

Have step-by-step test instructions (including sample input data) been set up?

Have the process for how original data will be recovered before and after test execution been described?

Has how test data will be identified, maintained, and version-controlled been identified?

Have you identified external or existing programs needed to support the test?

Have procedures for reporting errors, test results, and reworking and retesting programs been described?

Has the testing used the normal input and database or is special test input being used to perform the testing?

Have the expected results of the testing performed been documented?

Have you provide documentation to verify actual outcome?

Have you verified the browser compliance, error checking, data population, business logic and full functionality)?

#### **Load Testing**

Load tests put the application under heavy loads, such as testing of a Web site under a range of loads to determine at what point the system's response time degrades or fails. Automated testing tools are used to conduct this type of test.

Has the test data required for the particular test been identified?

Does the load testing validate the data at the field level?

Have any preconditions been setup?

Have step-by-step test instructions (including sample input data) been set up?

Has the process for how original data will be recovered before and after test execution been described?

Has how test data will be identified, maintained, and version-controlled been identified?

Have you identified external or existing programs needed to support the test?

Have procedures for reporting errors, test results, and reworking and retesting programs been described?

Has the testing used the normal input and database or is special test input being used to perform the testing?

Have the tools needed for load testing been identified?

Have the load assumptions and targets been verified?

Have the expected results of the testing performed been documented?

Has the actual outcome been provided and verified?

### **Volume Testing**

Volume tests subject a system to a high volume of data in order to determine how many transactions can be supported by the system. Automated testing tools are used to conduct this type of test.

Has the test data required for the particular test been identified?

Does the volume testing validate the data at the field level?

Have any preconditions been setup?

Have step-by-step test instructions (including sample input data) been set up?				
Has the process for how original data will be recovered before and after test execution been described?				
Has how test data will be identified, maintained, and version-controlled been identified?				
Have you identified external or existing programs needed to support the test?				
Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?				
Has the testing used the normal input and database or is special test input being used to perform the testing?				
Have the expected results of the testing performed been documented?				
Has the actual outcome been provided and verified?				
Acceptance Testing				
Testing by the client or sponsor to confirm that the system meets all requirements and is ready for operational use.				
Has the test data required for the particular test been identified?				
Does the acceptance testing validate the data at the field level?				
Have any preconditions been setup?				
Have step-by-step test instructions (including sample input data) been set up?				
Has the process for how original data will be recovered before and after test execution been described?				
Has how test data will be identified, maintained, and version-controlled been identified?				
Have you identified external or existing programs needed to support the test?				
Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?				
Has the testing used the normal input and database or is special test input being used to perform the testing?				
Have you set up testing and provided a numbered test case for each Use Cases provided?				
Have the expected results of the testing performed been documented?				
Has the actual outcome been provided and verified?				
Usability Testing				
Testing the ease with which users can learn and use the system.				
Has the test data required for the particular test been identified?				
Does the usability testing validate the data at the field level?				
Have any preconditions been setup?				
Have step-by-step test instructions (including sample input data) been set up?				
Has the process for how original data will be recovered before and after test execution been described?				
Has how test data will be identified, maintained, and version-controlled been identified?				
Have you identified external or existing programs needed to support the test?				
Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?				
Has the testing used the normal input and database or is special test input being used to perform the testing?				
Has test subjects been identified?				
Have the expected results of the testing performed been documented?				
Has the actual outcome been provided and verified?				
Has a test results questionnaire been provided?				
Compatibility Testing				
Testing performed to ensure compatibility with existing systems and hardware and software.				
Has the appropriate test environment been established?				
Has the test data required for the particular test been identified?				
Have any preconditions been setup?				

	Have step-by-step test instructions (including sample input data) been set up?
	Has the process for how original data will be recovered before and after test execution been described?
	Has how test data will be identified, maintained, and version-controlled been identified?
	Have you identified external or existing programs needed to support the test?
	Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?
	Has the testing used the normal input and database or is special test input being used to perform the testing?
	Have the expected results of the testing performed been documented?
	Has the actual outcome been provided and verified?
	Has a test results questionnaire been provided?
Cc	onformance Testing
	esting that verifies the system conformance to OPDIV standards and federal mandates and regulations.
	Have the appropriate standards been identified and included in the test plan?
	Has the test data required for the particular test been identified?
	Have any preconditions been setup?
_	Have step-by-step test instructions (including sample input data) been set up?
	Has the process for how original data will be recovered before and after test execution been described?
_	Has how test data will be identified, maintained, and version-controlled been identified?
_	Have you identified external or existing programs needed to support the test?
	Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?
	Has the testing used the normal input and database or is special test input being used to perform the testing?
	Have the expected results of the testing performed been documented?
	Has the actual outcome been provided and verified?
Re	egression Testing
Te	esting that retests previously test components to ensure that they still operate as expected.
	Has the test data required for the particular test been identified?
	Does the regression testing validate the data at the field level?
	Have any preconditions been setup?
-+	Have step-by-step test instructions (including sample input data) been set up?
	Has the process for how original data will be recovered before and after test execution been described?
_	Has how test data will be identified, maintained, and version-controlled been identified?
_	Have you identified external or existing programs needed to support the test?
	Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?
	Has the testing used the normal input and database or is special test input being used to perform the testing?
	Have you set up testing and provided a numbered test case for each Use Cases provided?
	Have the expected results of the testing performed been documented?
	ress Testing
Te	est that evaluates the system or component to determine the load under which it fails and why.
	Has the test data required for the particular test been identified?
	Does the stress testing validate the data at the field level?
	Have any preconditions been setup?
_	Have step-by-step test instructions (including sample input data) been set up?
	Has the process for how original data will be recovered before and after test execution been described?

	Has how test data will be identified, maintained, and version-controlled been identified?				
	Have you identified external or existing programs needed to support the test?				
	Have procedures for reporting errors, test results, and reworking and retesting programs been described?				
	Has the testing used the normal input and database or is special test input being used to perform the testing?				
	Have the tools needed for stress testing been identified, if applicable?				
	Have the testing assumptions and targets been verified?				
	Have the expected results of the testing performed been documented?				
	Has the actual outcome been provided and verified?				
٧	ulnerability Assessment Testing				
7	esting that identifies, quantifies and prioritizes system vulnerability.				
	Have you identified areas that need vulnerability assessments and documented the scenarios to be tested?				
	Has the test data required for the particular test been identified?				
	Have any preconditions been setup?				
	Have step-by-step test instructions (including sample input data) been set up?				
	Has the process for how original data will be recovered before and after test execution been described?				
	Has how test data will be identified, maintained, and version-controlled been identified?				
	Have you identified external or existing programs needed to support the test?				
	Have procedures for reporting errors, test results, and reworking and retesting programs been developed and provided?				
	Has the testing used the normal input and database or is special test input being used to perform the testing?				
	Have the expected results of the testing performed been documented?				
	Has the actual outcome been provided and verified?				
	Have the vulnerabilities been identified and risk plans established?				